UNITED STATES DEPARTMENT OF THE INTERIOR U. S. - MEXICO BORDER FIELD COORDINATING COMMITTEE

WATER-RESOURCES ISSUES IN THE LOWER RIO GRANDE VALLEY--BELOW FALCON RESERVOIR TO THE GULF OF MEXICO SUBAREA



Fact Sheet

INTRODUCTION

In 1994, the U.S. Department of the Interior (DOI) chartered the U.S.-Mexico Border Field Coordinating Committee (FCC) for the purpose of promoting and facilitating coordination among the DOI Bureaus on environmental issues of Departmental interest along the U.S.-Mexico border. One of the foremost issues identified was that of shared-water resources. Subsequently, a multi-bureau Shared-Water Resources Issues Team was created to identify, compile, and communicate significant issues related to the shared-water resources of the U. S.-Mexico border area. Woodward and Durall (1996), as part of the Issues Team, used surface-water drainage basins as the primary basis for defining and delineating the extent of the border area from a shared-water resources perspective, and divided the border area into 8 subareas (fig. 1). This Fact Sheet presents shared-water resource issues in the Lower Rio Grande Valley from below Falcon Reservoir to the Gulf of Mexico from a DOI perspective. The continued importance of border resource issues to DOI is evidenced by its recent participation in the development of the Border XXI Program. Border XXI represents a conceptual plan for binational cooperation in the transboundary region (U.S. Environmental Protection Agency, 1996a).

WATER-RESOURCES ISSUES IDENTIFICATION

The Issues Team surveyed representatives of the various DOI Bureaus to identify significant management and scientific issues associated with shared-water resources in each subarea. The Issues Team acknowledges a number of deficiencies in the issue-identification process, in that all of the land owners/managers in the subareas were not surveyed: (1) issues were not identified for non-Federal lands, including those managed by the State of Texas or those privately owned, and (2) issues have been identified only for the U.S. portion of the subarea, and a comprehensive issue-identification process requires data

from Mexico. These deficiencies notwithstanding, the Issues Team has identified a large number of the most pressing issues associated with shared-water resources from a DOI perspective. Solicitation of additional input from the States of Texas, Nuevo Leon, and Tamaulipas; the Government of Mexico; and private land-owners would enhance future efforts to more completely identify shared-water resource issues in the border area.

LOWER RIO GRANDE VALLEY-BELOW FALCON RESERVOIR TO THE GULF OF MEXICO SUBAREA

The Lower Rio Grande Valley subarea (fig. 2) is physiographically characterized as Gulf Coastal Plain. The subarea contains 10 basins that drain either to the Rio Grande (in Mexico, this river is called Rio Bravo), to the lower reaches of the Rio San Juan, or to the Arroyo Colorado in southern Texas (fig. 6). This subarea encompasses a total of 10,240 square miles-- of which 6,155 are in Mexico and 4,085 are in the United States. Unlike most of the other U.S.-Mexico border subareas, a relatively small portion (approximately 174 square miles) of this reach is under the ownership or administration of the U.S. Federal Government. Federally owned or managed areas include the Santa Ana, Lower Rio Grande Valley, and Laguna Atascosa National Wildlife Refuges (NWR) administered by the U.S. Fish and Wildlife Service and the Palo Alto Battlefield National Historic Site (fig. 6) administrated by the National Park Service. Although not specifically residing in the Lower Rio Grande Valley, issues pertinent to the National Park Service's Padre Island National Seashore are also discussed in this Fact Sheet.

From Falcon Reservoir, the Rio Grande/Rio Bravo flows southeastward approximately 275 river miles, terminating in the coastal wetlands and marshes of the Gulf of Mexico--including the Laguna Madre off the coasts of

8. Lower Rio Grande Valley---below Falcon Reservoir to the Gulf of Mexico

1. Pacific Basin / Salton Trough
2. Colorado River / Sea of Cortez
3. Mexican Highlands
4. Mimbres / Animas Basins
5. Rio Grande--Elephant Buthe Reservoir to above Rio Conchos
6. Rio Grande---Rio Conchos to Amistad Reservoir
7. Rio Grande---below Amistad Reservoir to Falcon Reservoir

Figure 1. Subareas within the U.S. - Mexico border area.

Texas and Tamaulipas. Among the unique habitats of this segment of the U.S.-Mexico border are the resacas (oxbow lakes) of the Lower Rio Grande Valley. The subarea is classified Tamaulipan brushland, which is characterized by dense, woody, and thorny vegetation and a high degree of biological diversity. Vegetation is taller and more lush in riparian areas than in the dryer uplands and provides not only important nesting and feeding habitat, but also serves as corridors for